

Symposium Abstracts



ISCBC 2018

International Symposium on Ciliate Biology
with



IRCNC-BC

International Research Coordination Network
for Biodiversity of Ciliates

an affiliated Society of



ISOP

International Society of Protistologists

Delhi, India

April 04 - 06, 2018

www.iscb2018.com

Organized by

Acharya Narendra Dev College, Maitreyi College, SGTB Khalsa College
University of Delhi, Delhi, India



PP 12

Morphology and morphogenesis of a novel stylonychid ciliate from India

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Abstract

The morphology and morphogenesis of a novel stylonychid ciliate isolated from a water sample collected from the Thane Creek, Mumbai, India, were investigated. The new species looked similar in morphology to the well known *Tetmemena pustulata*, however, on detailed investigation some non-overlapping differences in the ciliature were identified, i.e., fine differences in the number of cirri in marginal rows and the number of bristles in dorsal kineties of the Indian population in comparison with the population described by Wirnsberger et al. 1985, which justified the separation at the species level. A detailed description based on the examination of specimens in vivo and after protargol impregnation from raw culture is presented. Furthermore, the study also compares the resting cyst of the new species with related congeners. In this regard, the study extends the concept of cyst species to hypotrich ciliates, which thus far have been known only for spathidiids.

